AMENDMENTS TO THE CLAIMS

Claims 1-53. (Cancelled)

54. (New) A method for dynamic slip control in a scheduling system, the method comprising:

receiving a first interrupt;

obtaining the value of a first time when the first interrupt is received;

computing a first time interval until a second interrupt is scheduled;

obtaining the value of a second time when the first time interval is computed;

computing a second time interval, based on said first time interval and said second time value; and

scheduling said second interrupt to arrive at or after an expiration of said second time interval.

55. (New) A method according to claim 54, further comprising: after the act of obtaining the value of a first time when the first interrupt is received and before the act of obtaining the value of a second time when the first time interval is computed, updating a state variable of said scheduling system.

56. (New) A method according to claim 54, further comprising: after the act of obtaining the value of a first time when the first interrupt is received and before the act of obtaining the value of a second time when the first time interval is computed, interacting with a physical environment.

57. (New) A method according to claim 56, wherein said act of interacting with the physical environment comprises receiving a signal from the physical environment indicative of a state of the physical environment.

58. (New) A method according to claim 56, wherein said act of interacting with the physical environment comprises receiving an instruction from the physical environment to modify a state of the scheduling system.

59. (New) A method according to claim 54, further comprising estimating a latency of receipt of said first interrupt, and wherein said act of computing said second time interval is further based on said estimated latency.

60. (New) A method according to claim 59, wherein said first interrupt is received from a first platform and the act of estimating said latency comprises analyzing a performance characteristic of said platform.

61. (New) A method according to claim 59, wherein said first interrupt is received from a first platform and the act of estimating said latency comprises accessing statistical information regarding a performance characteristic of said platform.

62. (New) A method according to claim 54, further comprising estimating a processing time for updating a state of said scheduling system, and wherein said act of computing said second time interval is further based on said estimated time.

63. (New) A method according to claim 62, wherein the act of estimating said processing time comprises analyzing a performance characteristic of said scheduling system.

64. (New) A method according to claim 62, wherein the act of estimating said processing time comprises accessing statistical information regarding a performance characteristic of said scheduling system.

65. (New) A computer program product for use with a scheduling system comprising a computer readable medium encoded with a program module, the program module including instructions for directing the scheduling system to:

receive a first interrupt;

obtain the value of a first time when the first interrupt is received;

compute a first time interval until a second interrupt is scheduled;

obtain the value of a second time when the first time interval is computed;

compute a second time interval, based on said first time interval and said second time value; and

schedule said second interrupt to arrive at or after an expiration of said second time interval.

66. (New) A computer program product according to claim 65, wherein the program module further includes instructions directing the scheduling system to update a state variable of said scheduling system after the act of obtaining the value of a first time when the first interrupt is received and before the act of obtaining the value of a second time when the first time interval is computed.

67. (New) A computer program product according to claim 65, wherein the program module further includes instructions directing the scheduling system to interact with a physical environment after the act of obtaining the value of a first time when the first interrupt is received and before the act of obtaining the value of a second time when the first time interval is computed.

68. (New) A computer program product according to claim 67, wherein said instructions directing the scheduling system to interact with the physical environment comprise instructions directing the scheduling system to receive a signal from the physical environment indicative of a state of the physical environment.

69. (New) A computer program product according to claim 67, wherein said instructions directing the scheduling system to interact with the physical environment comprise instructions directing the scheduling system to receive an instruction from the physical environment to modify a state of the scheduling system.

70. (New) A computer program product according to claim 65, wherein the program module further includes instructions directing said scheduling system to estimate a latency of receipt of said first interrupt, and wherein said instructions directing the scheduling system to compute said second time interval further include instructions to compute said second time interval based on said estimated latency.

71. (New) A computer program product according to claim 70, wherein said first interrupt is received from a first platform and the instructions directing said scheduling system to estimate said latency comprise instructions directing said scheduling system to analyze a performance characteristic of said platform.

72. (New) A computer program product according to claim 70, wherein said first interrupt is received from a first platform and the instructions directing said scheduling system to estimate said latency comprise instructions directing said scheduling system to access statistical information regarding a performance characteristic of said platform.

73. (New) A computer program product according to claim 65, wherein the program module further comprises instructions directing the scheduling system to estimate a processing time for updating a state of said scheduling system, and wherein said instructions directing the scheduling system to compute said second time interval further include instructions to computer said second time interval based on said estimated time.

74. (New) A computer program product according to claim 73, wherein the instructions directing the scheduling system to estimate said processing time include instructions directing the scheduling system to analyze a performance characteristic of said scheduling system.

75. (New) A computer program product according to claim 73, wherein the instructions directing the scheduling system to estimate said processing time comprise instructions directing the scheduling system to access statistical information regarding a performance characteristic of said scheduling system.

76. (New) A scheduling system employing dynamic slip control, the scheduling system comprising:

at least one input adapted to receive an interrupt;

at least one timer circuit; and

a processor coupled to said timer circuit and said input, the processor adapted to obtain the value of a first time when the first interrupt is received, compute a first time interval until a second interrupt is scheduled, obtain the value of a second time when the first time interval is computed, and compute a second time interval, based on said first time interval and said second time value, and schedule said second interrupt to arrive at or after an expiration of said second time interval.

77. (New) A system according to claim 76, wherein the processor is further adapted to update a state variable of said scheduling system after the act of obtaining the value of a first time when the first interrupt is received and before the act of obtaining the value of a second time when the first time interval is computed.

78. (New) A system according to claim 76, further comprising a physical environment coupled to said processor and wherein the processor is further adapted to interact with the physical environment after the act of obtaining the value of a first time when the first interrupt is received and before the act of obtaining the value of a second time when the first time interval is computed.

79. (New) A system according to claim 78, wherein the processor is further adapted to receive a signal from the physical environment indicative of a state of the physical environment.

80. (New) A system according to claim 78, wherein the processor is further adapted to receive an instruction from the physical environment to modify a state of the scheduling system.

81. (New) A system according to claim 76, wherein the processor is further adapted to estimate a latency of receipt of said first interrupt, and compute said second time interval based further on said estimated latency.

82. (New) A system according to claim 81, further comprising a platform adapted to send said first interrupt, said processor further adapted to analyze a performance characteristic of said platform.

83. (New) A system according to claim 81, further comprising a platform adapted to send said first interrupt, said processor further adapted to access statistical information regarding a performance characteristic of said platform.

84. (New) A system according to claim 76, wherein the processor is further adapted to estimate a processing time for updating a state of said scheduling system, and compute said second time interval based further on said estimated time.

85. (New) A system according to claim 84, said processor further adapted to analyze a performance characteristic of said scheduling system.

86. (New) A system according to claim 84, said processor further adapted to access statistical information regarding a performance characteristic of said scheduling system.